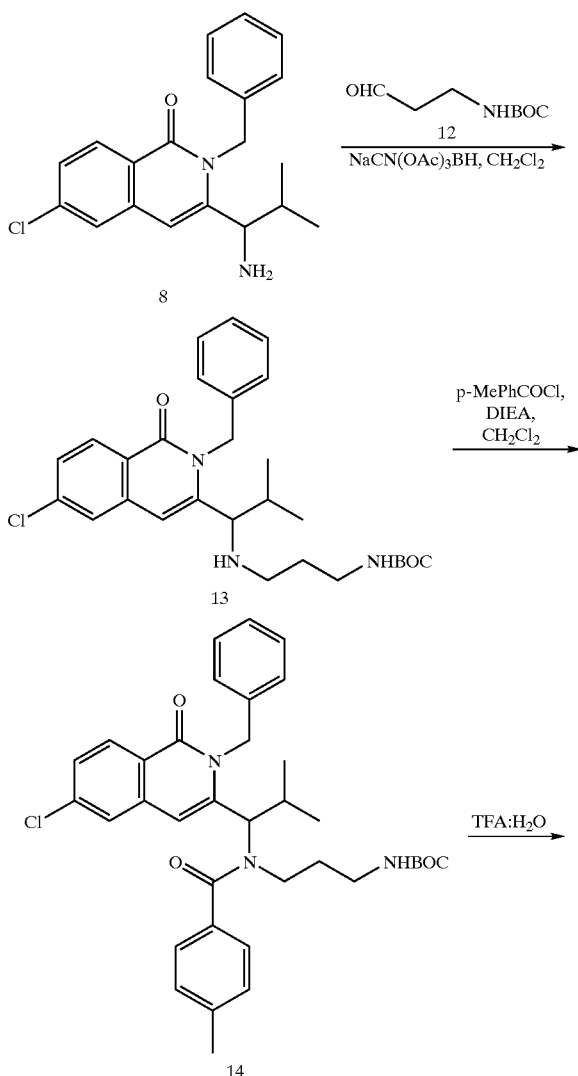


[0408] Isoquinoline 8 (131 mg, 0.34 mmol), aldehyde 9 (115 mg, 0.56 mmol),  $\text{Na}(\text{OAc})_3\text{BH}$  (291 mg, 1.38 mmol), and  $\text{CH}_2\text{Cl}_2$  (1.1 mL) was maintained at 23° C. for 3 h. The reaction mixture was diluted with EtOAc (20 mL) and washed with 1 N NaOH (5 mL) and brine (5 mL). The organic layer was dried ( $\text{MgSO}_4$ ), filtered, and concentrated. The resulting residue was purified by flash column chromatography (3:1 hexanes:EtOAc) to yield 150 mg (85%) of 10.

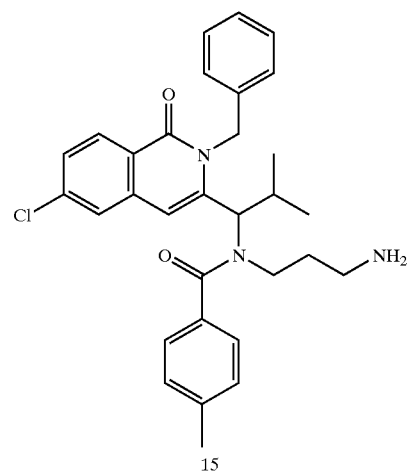
[0409] A solution of isoquinoline 10 (143 mg, 0.28 mmol),  $\text{POCl}_3$  (0.45 mL, 4.8 mmol), and PhMe (T4 mL) was heated to 110° C. After 6 h, the reaction mixture was diluted with EtOAc (40 mL) and washed with 1 N NaOH (20 mL) and brine (10 mL). The organic layer was dried ( $\text{MgSO}_4$ ), filtered, and concentrated. The resulting residue was purified by flash column chromatography (20:1  $\text{CHCl}_3$ :MeOH) to yield 99 mg (70%) of 11 as a white solid.

### Example 2

#### [0410] Synthesis of Compounds



-continued



[0411] Isoquinoline 8 (515 mg, 1.47 mmol), aldehyde 12 (255 mg, 1.47 mmol),  $\text{NaCN}(\text{OAc})_3\text{BH}$  (420 mg, 1.98 mmol), and  $\text{CH}_2\text{Cl}_2$  (4.1 mL) was maintained at 23° C. for 2 h. An additional portion of 12 (225 mg, 1.30 mmol) in  $\text{CH}_2\text{Cl}_2$  (0.6 mL) was then added. After an additional 3 h, the reaction mixture was diluted with EtOAc (20 mL) and washed with 1 N NaOH (5 mL) and brine (5 mL). The organic layer was dried ( $\text{MgSO}_4$ ), filtered, and concentrated. The resulting residue was purified by flash column chromatography (3:1 hexanes:EtOAc; 1:1 hexanes:EtOAc) to yield 630 mg (86%) of 13.

[0412] To a solution of isoquinoline 13 (85 mg, 0.17 mmol), diisopropylethylamine (DIEA, 0.12 mL, 0.68 mmol), and  $\text{CH}_2\text{Cl}_2$  (0.6 mL) at 23° C. was added p-toluenoyl chloride (45  $\mu\text{L}$ , 0.34 mmol). After 4 h, the reaction mixture was diluted with EtOAc (20 mL) and washed with saturated aqueous  $\text{NaHCO}_3$  (5 mL) and brine (5 mL). The organic layer was dried ( $\text{MgSO}_4$ ), filtered, and concentrated. The resulting residue was purified by flash column chromatography (3:1 hexanes:EtOAc) to yield 83 mg (80%) of 14.

[0413] Isoquinoline 14 (80 mg, 0.13 mmol) and TFA:H<sub>2</sub>O (97.5:2.5, 2 mL) was maintained at 23° C. for Th. The reaction mixture was concentrated. The residue was dissolved in EtOAc (20 mL) and washed with 1 N NaOH (5 mL) and brine (5 mL). The organic layer was dried ( $\text{MgSO}_4$ ), filtered, and concentrated to provide 65 mg (98%) of 15 as a white solid which was deemed >95% pure by <sup>1</sup>H NMR and LCMS analysis.

### Example 3

[0414] Using the methods of the invention as exemplified in Examples 1 and 2 above, the following compounds were prepared: